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by Shirin Roshanafshar and Emma Hawkins

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^{r} revised
x suppressed to meet the confidentiality requirements of the *Statistics Act*
^{E} use with caution
F too unreliable to be published
* significantly different from reference category ($p < 0.05$)

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Food insecurity in Canada

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Highlights

- Food insecurity rates have remained relatively stable over time. Every year from 2007 to 2012, approximately 5% of Canadian children and 8% of Canadian adults lived in food insecure households. This means that they did not have access to a sufficient variety or quantity of food due to lack of money.
- The most recent statistics indicate that in 2011–2012, 8.3% of Canadian households experienced food insecurity.
- Nunavut had the highest rate of food insecurity (36.7%), over four times the Canadian average (8.3%) in 2011–2012.
- In 2011–2012, the rate of food insecurity was more than three times higher in households where government benefits were the main source of income (21.4%) compared with households with an alternate main source of income (6.1%).
- Among various household types, lone-parent families with children under 18 reported the highest rate of household food insecurity, at 22.6% in 2011–2012.

Food insecurity exists within a household when one or more members do not have access to the variety or quantity of food that they need due to lack of money.[1,2] In 2012, Canadian food bank usage continued to increase across the country, indicating that some households still experienced difficulties putting food on the table.[3]

Researchers have found that people who experience food insecurity also tend to report:

- poor or fair health
- poor functional health, or an inability to perform key activities due to health problems
- long-term physical and/or mental disabilities that limit activity at home, work or school
- multiple chronic conditions
- major depression
- a perceived lack of social support, such as someone to confide in, count on, or go to for advice.[4,5]

This article describes food insecurity in Canada, including various associated factors such as income source, number of children in the household and household type. Data from the 2007 to 2012 Canadian Community Health Survey (CCHS) were used with a focus on 2011–2012, to highlight rates of food insecurity in Canada.

Defining food insecurity

Respondents answered 18 questions related to the food security situation of their household in the previous 12 months and were placed in one of the following groups:

1. Food secure: there was no (or only one) indication of difficulty with access to food because of inadequate income.

2. Moderately food insecure: the quality and/or quantity of food consumed were inadequate.

3. Severely food insecure: respondents indicated that they reduced their food intake and/or experienced disrupted eating patterns.

The categories of "moderate" and "severe" food insecurity were combined in one category and are referred to as "food insecurity" throughout the article.

All of the above definitions are adopted from Health Canada's model of food security status.[1]

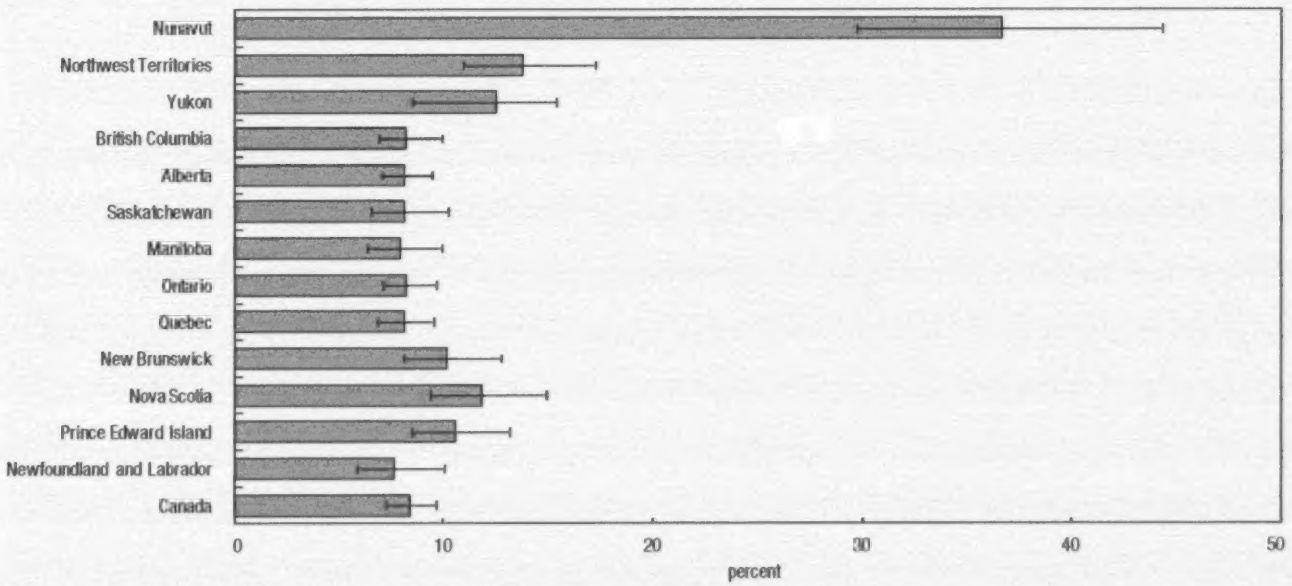
Food insecurity in Canada, the provinces and territories

About 8% of adults[7,8] and 5% of children[9] experienced food insecurity[10] in Canada each year between 2007 and 2012 (data not shown).

In 2011–2012[11], approximately 1.1 million Canadian households experienced food insecurity. Of these, more Canadian households experienced moderate food insecurity (5.8%) than severe food insecurity (2.5%).

The territories had considerably higher rates of food insecurity than the provinces in 2011–2012. Specifically, Nunavut had the highest rate at 36.7%, which was over four times the Canadian average (8.3%). The Northwest Territories had the second highest rate at 13.7%, followed by Yukon at 12.4%. Among the provinces, Nova Scotia (11.9%), Prince Edward Island (10.6%) and New Brunswick (10.2%) had the highest rates of food insecurity (Chart 1).

Chart 1
Percentage of food insecure households in Canada, provinces and territories, 2011–2012



Note: The lines overlaid on the bars indicate the 95% confidence interval. They enable comparison of statistical differences between estimates.
Source: Statistics Canada, Canadian Community Health Survey, 2011–2012.

Main source of household income

For this article, income source is organized into two categories:

1. Government benefits – where the main source of household income is one of the following:

- employment insurance
- worker's compensation
- benefits from Canada or Quebec Pension Plan
- Old Age Security and Guaranteed Income Supplement
- provincial/municipal social assistance or welfare
- Child Tax Benefit

2. Alternate (other) source of income – where the main source of household income is one of the following:

- wages and salaries
- income from self-employment
- dividends and interest (e.g., on bonds and savings)
- job-related retirement pensions, superannuation and annuities
- RRSP/RRIF (Registered Retirement Savings Plan/ Registered Retirement Income Fund)
- child support
- alimony

Food insecurity and source of income

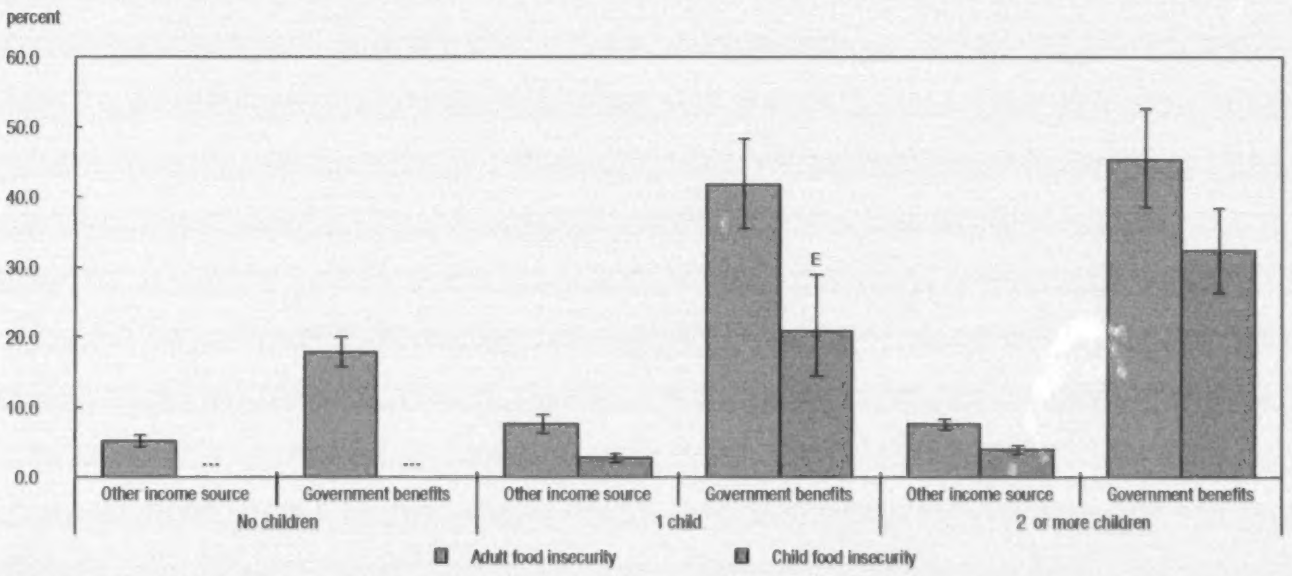
Although low income contributes to food insecurity[5], there are other important factors, such as a household's main source of income. Notably, in 2011–2012, households that relied on government benefits as their main source of income had much higher rates of food insecurity (21.4%) than households with an alternate main source of income (6.1%).

Low-income households were examined to better understand the relationship between food insecurity and the main source of household income. Low-income households are those in which the total income falls within the lowest 10% of all Canadian households.

Every year from 2007 to 2012, low-income households where government benefits were the main source of income were more likely to experience food insecurity than those with an alternate main source of income (data not shown). Among low-income households in 2011–2012, 41.4% of those with government benefits as their main source of income experienced food insecurity, while 23.0% of those with an alternate main source of income experienced food insecurity.

Chart 2

Adult and child food insecurity by main source of household income and number of children in the household, Canada, 2011–2012



E use with caution (these data have a coefficient of variation from 16.6% to 33.3%)

... not applicable

Note: The lines overlaid on the bars indicate the 95% confidence interval. They enable comparison of statistical differences between estimates.

Source: Statistics Canada, Canadian Community Health Survey, 2011–2012.

Child food insecurity

Food insecurity can be harmful to children's healthy growth and development. Living in a food-insecure environment can pose numerous health risks for children due to a lower consumption of fruits and vegetables, milk products, or other important sources of vitamins and minerals. Such deficiencies may lead to serious health problems like obesity, developmental abnormalities, or a compromised immune system.[12,13]

Other research suggests that adults will often attempt to protect their children from food insecurity by reducing the variety and quantity of their own meals to prevent children from going hungry.[14] This is consistent with findings from this study, where in 2011–2012, 8.2% of adults and 4.9% of children lived in households that were food insecure. During this same period, children living in "government-benefit households" experienced food insecurity to a much higher degree (26.6%) than children living in households with an alternate source of income (3.5%).

Food insecurity and the number of children in the household

Households with children experienced a higher rate of food insecurity than those without children. In 2011–2012, 10.3% of households with children and 7.5% of households without children were food insecure.[15]

Regardless of the number of children in the household, rates of food insecurity were always higher for households with government benefits as their main source of income, compared with households reporting an alternate main source of income.

As mentioned, research has shown that the protective behaviour of adults towards their children results in higher rates of food insecurity among adults.[14] However, this protective effect is less evident in households with two or more children. In this study, the gap between adult and child food insecurity was greatest in households with only one child (Chart 2).

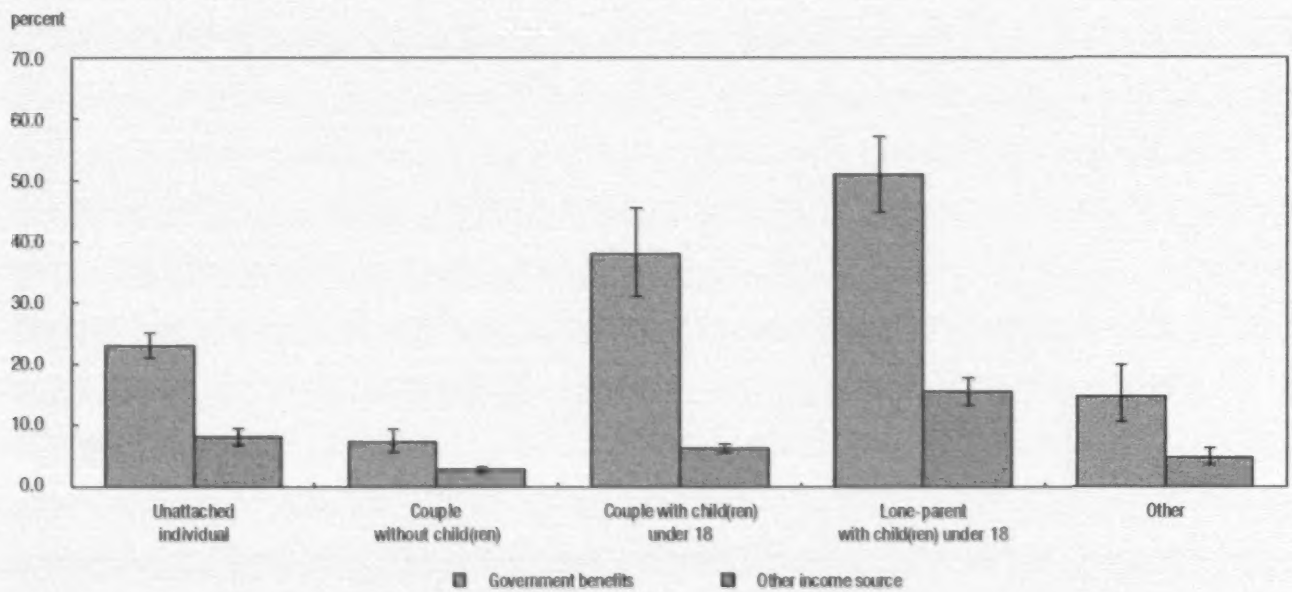
Food insecurity by household type

Previous research has also shown a strong relationship between food insecurity and household type.[16,17] Whether individuals live alone, with a significant other, or with children are all factors related to household food insecurity.

Household food insecurity was examined by various household types and sources of income. In every type of household, rates of food insecurity were higher in households where the main source of income was government benefits (Chart 3).

In 2011–2012, lone-parent families with children under 18 reported the highest rate of household

Chart 3
Food insecurity by main source of household income and household type, Canada, 2011–2012



Note: The lines overlaid on the bars indicate the 95% confidence interval. They enable comparison of statistical differences between estimates.
Source: Statistics Canada, Canadian Community Health Survey, 2011–2012.

food insecurity at 22.6%. In addition, 11.9% of unattached individuals and 7.1% of couples living with children under 18 experienced household food insecurity. Couples with no children reported the lowest rate of household food insecurity at 3.5%.

Summary

Households that relied on government benefits (e.g., employment insurance, Child Tax Benefit, provincial/municipal social assistance or welfare) as their main source of income were over three times more likely to experience food insecurity than those with an alternate main source of income (e.g., salaries and wages, self-employment income, alimony, child support).

Household food insecurity was more common among households with children than those without.

Every year from 2007 to 2012, there were more adults than children who experienced food insecurity. In 2011–2012, 10.2% of households with children and 7.6% of households without children were food insecure.

Among various household types in 2011–2012, lone-parent families reported the highest rate of food insecurity, while couples with no children reported the lowest.

Shirin Roshanafshar and Emma Hawkins are analysts with the Health Statistics Division.

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6. This article presents data from the 2007 to 2012 cycles of the Canadian Community Health Survey (CCHS). Every year, CCHS collects data from approximately 65,000 respondents aged 12 or older, residing in households in all provinces and territories. The CCHS is an ongoing survey that collects a wide range of information about the health status of Canadians, factors determining their health status and their use of health care services. Residents of Indian reserves, health care institutions, some remote areas and full-time members of the Canadian Forces are excluded.
7. Adult and child food insecurity are calculated by parsing the food security household variable into constituent adult and child components.
8. Adults are those aged 18 and older.
9. Children are those aged 17 and younger.
10. Unless otherwise specified, food insecurity rates represent the percentage of moderate and severe food insecurity, with household weights applied.
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